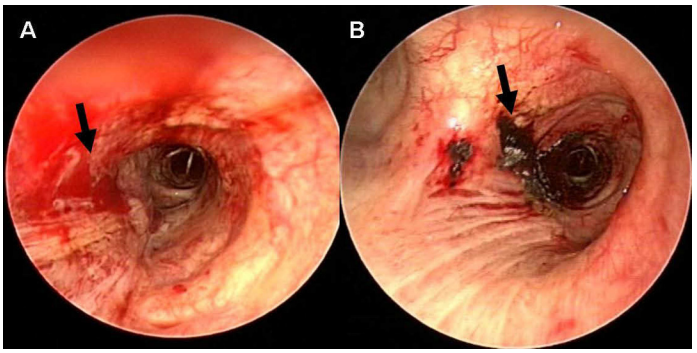

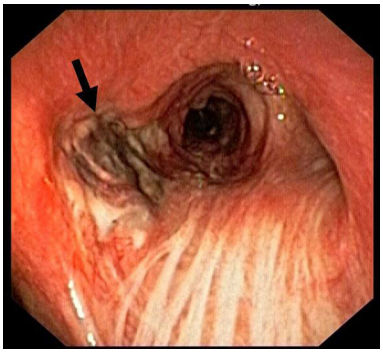

P1-013 Chest Medicine and Intervention Posters, Mon, Sept 3

Secondary carinal Y-stent implantation for best multimodality treatment of advanced lung cancer cases

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We evaluated the effects and results of our endobronchial treatment modalities in 13 patients whose oncologic treatments were stopped because of postobstructive pneumonia and atelectasis due to left secondary carinal tumor.

Three of the patients were females and 10 of them were males. The mean age was 55 years (49-63). The diagnosis was metastatic lung cancer in 2 cases, small cell lung cancer in 1 case and non-small cell lung cancer in 10 cases. In all cases chemotherapeutic agents were stopped due to postobstructive pneumonia and fever; radiotherapy could not be applied because of atelectasis. Endobronchial treatments were performed for tumoral lesion in left secondary carinal region and modified y-stents were implanted. The relief of the postobstructive pneumonia and atelectasis were provided in 12 of the cases. In these cases, radiotherapy and chemotherapy treatments were initiated.

Therapeutic bronchoscopic procedures are used in lung cancer cases routinly, but no y-stent implantation for secondary carinal lesions are reported. We believe that this procedure will provide a chance to treat lung cancer patients.

P1-014 Chest Medicine and Intervention Posters, Mon, Sept 3

Easy endobronchial resection technique with a new device

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Various endobronchial resection methods (Nd-YAG/Nd-YAP laser, Argon plasma coagulation, cryotherapy, etc.) could be performed for endoluminal tumors and lesions. Balloon dilatation and tamponade are widely used with other endobronchial methods for control of bleeding or dilatation. We developed a new resection technique and designed a special balloon for resecting endoluminal tumoral lesions. This device is a balloon catheter covered with a special web-shaped material available in various sizes. We used resector balloon in 44 interventions for resecting endobronchial tumors and also control of bleeding and dilatations were successfully achieved during the procedures. Endobronchial tumor resection becomes a simpler and safer method with the use of this special balloon.

P1-015 Chest Medicine and Intervention Posters, Mon, Sept 3

The utility of MAGE gene detection in bronchial washing fluid in patients with peripheral NSCLC

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Background: The melanoma antigen (MAGE)-encoding genes are known to be expressed in various cancer cells, including non-small cell lung cancer (NSCLC), and silent in all normal tissues except testis. In patients with peripheral NSCLC, bronchial washing fluid could be used to detect MAGE gene, suggesting the diagnosis of lung cancer. In order to evaluate the diagnostic utility of MAGE test in patients with peripheral NSCLC, bronchial washing fluid was investigated in patients with peripheral pulmonary nodule, which was invisible by bronchoscopy.

Methods: Bronchial washing fluid from 52 patients was used for cytologic examination and MAGE gene detection, using RT-nested-PCR of A1-A6 mRNA. Results were compared to final diagnosis of patients confirmed by pathology.

Results: Among the 52 subjects, NSCLC was diagnosed in 35 patients and benign pulmonary diseases in 17. The MAGE mRNA was detected in 16 of 35 (45.7%) NSCLC patients, while conventional cytology examinations revealed positive in 4 of 35 (11.4%). None of the expression of MAGE was observed in 17 benign pulmonary disease patients.

Conclusion: The MAGE test of bronchial washing fluid could be helpful for the diagnosis of peripheral NSCLC with excellent specificity.

P1-016 Chest Medicine and Intervention Posters, Mon, Sept 3

Video-assisted mediastinoscopy and EBUS-TBNA in candidates for lung cancer surgery

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Background: Mediastinal lymph node metastasis is one of the most principal prognostic factors in lung cancer treatment. N2 patients have a poor prognosis compared to N1, N0 cases. Histological diagnosis of mediastinal lymph node metastasis is necessary for the indication of surgery. There are several methods to examine the mediastinal lymphadenopathy, such as mediastinoscopy, endobronchial ultrasound-guided trans-bronchial needle aspiration (EBUS-TBNA) and etc. but it is neither practical nor clinically possible, however, to use mediastinoscopy or EBUS for all patients with primary lung cancer.

Methods: A prospective phase II study of indications for surgery, using video-assisted mediastinoscopy (VAM) and EBUS-TBNA to detect mediastinal lymph node metastasis was conducted in patients with resectable primary lung cancer of clinical stages I–IIIA. Indications for VAM were based on tumor size, CT findings and tumor markers, and patients were placed in group V (VAM or EBUS) or group A (thoracotomy without VAM) accordingly. EBUS-TBNA was performed if the CT findings showed mediastinal lymph nodes larger than 15 mm in the shortest axis. Mediastinal lymph node involvement confirmed by VAM or EBUS was treated with chemotherapy followed by thoracotomy (group C) or radiotherapy (group D), and cases without detected metastasis underwent thoracotomy and systematic lymph node dissection (group B).

Group A patients had primary tumor resection and lymph node sampling and group C patients, tumor resection and extended dissection of mediastinal lymph nodes via median sternotomy.

Results: Of the 500 eligible cases who were introduced to our center between Oct. 1998 and Des.2006, 249 underwent VAM (group V) and 217 had thoracotomy without VAM (group A). EBUS-TBNA was indicated for 34 patients. Of the VAM patients, 189 negative patients for metastasis received thoracotomy and 60 positive cases received 2 courses of chemotherapy and 28 responders received thoracotomy and 32 non-responders received radiation or best supportive care. Twelve negative cases by EBUS-TBNA received thoracotomy and 22 positive cases received chemotherapy. Six responders received thoracotomy and 16 non-responders received radiation. The two- and 5- year survival rates of groups A, and B were 94.8%, and 90.0% (group A), and 90.8% and 59.1% (group B), respectively, while the 2-year rate in Group C was 68.0%.

Conclusions: We have demonstrated the usefulness of indication criteria for VAM and EBUS for the selection of candidates for primary lung cancer surgery. These indication criteria enabled us to avoid doing valueless examinations and to avoid unnecessary thoracotomy. The more favorable group A outcomes indicated both successful selection by these criteria of patients not requiring mediastinal examination, and superfluity of complete lymph node dissection, proper lymph nodes sampling being sufficient for staging.

P1-017 **Chest Medicine and Intervention Posters, Mon, Sept 3**

Prognotic value of plasma D-Dimer levels in lung carsinoma

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The plasma concentrations of several proteases of the clothing system have been shown to predicy prognosis in malignancy.This study is aimed to investigate the prognostic value of plasma levels of D-Dimer and other clothing system parameters in lung cancer.

Between 2004-2005 years, 100 new diagnosed lung cancer patients and and 25 healty person control groups were evaluated before treatment. These patiens has't a history of clothing system disorder or anticoaqulant therapy. Patients plasma D-Dimer and protrombine time, APTT, INR, biochemical parameters and blood count analysis were calculated. Patients lung cancer stages, age, histology, thjerapy modalities (chemotherapy cycles, radiotherapy), therapy results, survival times were determined.

Multivariate statistical analysis was carried out using the Cox's proportional hazards model. Patients median age was 67; 86 were male. Patients stages were; 65 % local advanced, 35% advanced disease, (stage 4). Histologic gropus were; 72% nonsmall cell carsinoma, 28% small cell carsinoma. Patients median D-Dimer levels is 1250 mgr/dl that is significantly higher than control groups. Survival times was significantly higher in low D-Dimer patients(p(<)<0.05). The plasma levels of D-dimer predicted survival independently from the clinical stage of disease, histological type and performance status (HR=5,1; 95% confidence interval). Plasma D-Dimer levels was significantly higer in metastatic disease (p<(<)0.01) .

As a result: These results suggest that plasma levels of D-dimer might be useful for predicting the clinical outcome in patients with lung cancer. However, further prospective studies are needed in a larger population to confirm about it and it's cutt off point in malignansy.

P1-018 **Chest Medicine and Intervention Posters, Mon, Sept 3**

Artificial intelligence, system analysis and simulation modeling for recognition of lung cancer distant metastases

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Purpose: It was well-known, that survival of lung cancer (LC) patients (LCP) with distant metastases (M1) takes several months. The search of markers for recognition of M1 was realized.

Methods: In trial (1986-2006) consecutive asimptomatic cases after surgery, monitored 242 LCP (males=204, females=38; age=57.4±8.9 years; tumor size=4.6±2.3 cm; pneumonectomies=22, bi/lobectomies=125, segmentectomies=54, exploratory thoracotomies and biopsies=41) with pathologic stage T1-4N0-3M0-1 (squamous=115, adenocarcinoma=97, large cell=30, T1=93, T2=67, T3=45, T4=37; N0=148, N1=5, N2=19; N3=70; G1=56, G2=69, G3=117; M0=147, M1=95) were reviewed. Variables selected for study were input levels of immunity blood parameters (IgG, IgM, IgA, natural antibodies, circulating immune complexes, percentage, absolute count and total population number of T-lymphocytes, B-cells, CD4, CD8, K-cells, CD1, CDw26, monocytes, CD4+2H, CD8+VV, CD4/CD8, leukocytes, lymphocytes, polymorphonuclear and sticknuclear leukocytes, NST-tests, indexes of stimulation of leukocytes (IS1-2), index of thymus function, phagocytic number, phagocyte index, index of complete phagocytosis), sex, age, TNMG. Representativeness of samplings was reached by means of randomization based on unrepeated random selection. Logistic regression, multi-factor clustering, discriminant analysis, structural equation modeling, Monte Carlo, bootstrap simulation and neural networks computing were used to determine any significant overall regularity.

Results: Logistic regression analysis displayed that detection of M1 significantly depended on: B-cells, K-cells, NST-spontaneous, IS2,